

# The Relationship Between Personal Income and Taxable Income

Taxable income of individuals has grown much faster than the OBE personal income measure over the past two decades, but the differential was not due to the fact that personal income differs conceptually from the income subject to Federal tax. This article outlines the relationship between the two magnitudes and indicates the factors accounting for the difference in growth rates.

**P**ERSONAL income is calculated by the Office of Business Economics as a measure of the current income received by persons from all sources. In this context, "persons" are defined to consist not only of individuals but also nonprofit institutions and private trust and welfare funds. In addition to incomes arising from production, the estimate of personal income includes transfers from government and business; it also includes substantial amounts of imputed income in addition to that received in money form.

Personal income is not a measure of the income subject to the Federal personal income tax, because it includes some income not subject to the tax—such as most transfers and the income of nonprofit institutions—and excludes some items that are subject to taxation—such as realized capital gains. Adjustment of personal income for these and other conceptual differences yields an estimate of the total adjusted gross income (AGI) of taxable and nontaxable individuals. That estimate of total AGI differs from taxable income as compiled by the Internal Revenue Service from individuals' tax returns.

The difference consists of deductions, exemptions, the AGI reported on nontaxable returns, and the estimated amount of unreported taxable and nontaxable AGI. This article presents annual data, for the period 1947-68, showing the relationship between the OBE personal income estimate and taxable income, that is, the figure to which the tax rate structure is applied in determining personal income tax liability. The relationship is traced in table 1.<sup>1</sup>

## *Faster growth of taxable income*

Lines 2 and 3 of table 1 summarize the various subtractions from and additions to the OBE estimate of personal income that are necessary to arrive at an income measure conceptually equivalent to "adjusted gross income" as defined for purposes of Federal income taxation. These items are discussed in more detail at the end of this article. After the various subtractions and additions are made, the resulting magnitude (line 5) is the OBE estimate of adjusted gross income of all individuals, both taxable and nontaxable.

The OBE estimate of total AGI shows a growth path over time very similar to that of personal income. Thus, although individuals' taxable income rose at a significantly faster

rate than personal income in the period 1947-68, that divergence was basically not due to the conceptual difference between personal income and AGI. Rather, it was principally due to the slow growth in taxable individuals' exemptions and in nontaxable and nonreported incomes which more than offset the rapid growth in taxable individuals' deductions. Thus, an ever increasing share of estimated total AGI—and of personal income—flowed through into reported taxable income. In 1968, the ratio of personal to taxable income was 51 percent, up from 39½ percent in 1947.

## *Rapid growth of deductions*

Aggregate deductions of taxable individuals grew faster than AGI throughout the 1947-68 period. Before 1960, the increase in deductions was largely due to a very fast rise in itemized deductions. The growth rate of itemized deductions slowed in the more recent period, but still substantially exceeded the growth rate of the amount claimed under the standard deduction. This was so, even though standard deductions received a marked boost in 1964 by the introduction by the Revenue Act of 1964 of the minimum standard deduction calculation, which induced a significant number of taxpayers to forgo itemizing.

## *Exemptions grow slowly*

In contrast to deductions, the growth of aggregate personal exemptions was quite slow. From 1948 onward, the personal exemption was stable at \$600. Thus, growth of the aggregate was

1. The data in table 1 extend forward and make some corrections in the series published in William H. Widdow, "The Responsiveness of Federal Personal Income Taxes to Income Changes," *BULLETIN OF CURRENT BUSINESS*, December 1967. The revisions affect most of the data for 1968. For earlier years, the revisions affect certain of the items that are counted in personal income but excluded from adjusted gross income; the affected items are in lines 2(b) and 2(d) of table 1.

largely limited by the growth of the population eligible for the exemption. In the past decade, the effect of a marked slowing in births has been only partly offset by an accelerated rise in the number of persons aged 65 or over and thus eligible for an additional exemption. Over the next few years, however, faster growth of aggregate exemptions can be expected as a result of the Tax Reform Act of 1969, which

provides for increasing the personal exemption to \$750 by 1973.

### ***Nontaxable and nonreported income***

The exemptions and deductions of taxable individuals account for the difference between taxable income (line 11, table 1) and the AGI of taxable individuals as compiled by IRS (line 8). The latter measure differs from the OBE estimate of total AGI of all individuals (line 5) by the amount of reported but nontaxable AGI plus the estimated amount of nonreported AGI. These magnitudes are shown on lines 6 and 7 of table 1.

As a result of the growth of money incomes—reflecting both real growth and inflation—there was little net expansion from 1947 to 1968 in the aggregate amount of AGI reported on nontaxable returns (i.e., returns showing AGI equaled or exceeded by exemptions, deductions, and/or tax credits). Consequently, reported but nontaxable AGI dropped from 8½ percent of OBE's estimate of total AGI in 1947 to only 2¾ percent in 1968.

The amount of nonreported income, as estimated by OBE, grew very slowly over the two decades, and its share in estimated total AGI also declined—from 12¾ percent in 1947 to 7½ percent in 1968. Because of various imperfections in the data and the estimating techniques, the estimate of nonreported income should not be used as the indicator of noncompliance.

One source of possible error in the estimates is the OBE measure of personal income, which is of course itself subject to error. Another factor, which tends to inflate the estimate of nonreported AGI, is that the estimate includes some incomes that were not reported because they were received by persons with incomes below the filing requirement. Another consideration is that the data presented in this article are based in part on tax returns as filed, and thus reflect not only nonreporting but also errors and differences of opinion which are subsequently rectified through the auditing and appellate procedures provided by law. While no precise measure is available of the amounts involved, it is probable that final data would show a smaller degree of noncompliance than that suggested by the estimates of nonreported income presented here.

On the other hand, it was necessary in deriving OBE's estimate of total AGI to use tax-return data for the items (such as the taxable portions of capital gains and taxable pensions) included in AGI but not in personal income. This procedure, which was necessary in the absence of independent data, involves the implicit assumption that all such incomes are reported; it thus presumably puts a downward bias on the estimates of nonreported income and of the ratio of nonreported income to total AGI.

## **Conceptual Differences Between Personal Income and Adjusted Gross Income**

### ***Subtractions from personal income***

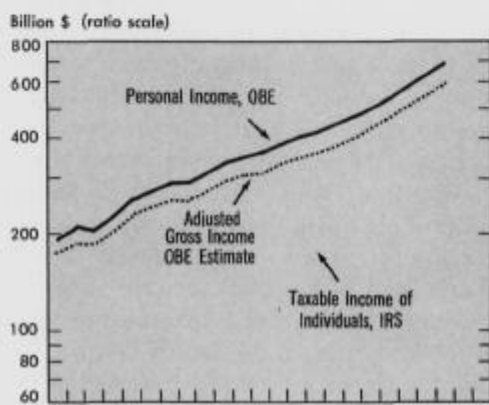
Line 2 of table 1 shows the estimated amount of personal income that is either not taxable or taxable on a different accounting basis than that used in recording personal income. Transfer payments are the largest of the items included in personal income but excluded from adjusted gross in-

come. The excluded amount comprises all types of transfers except military retirement pay. Most of the personal income component called "other labor income" is also excluded from adjusted gross income. The excluded amount consists largely of employer contributions to private pension and welfare funds and compensation for injuries.

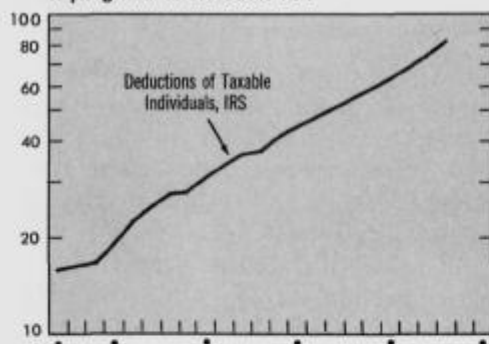
CHART 11

### **Personal and Taxable Income**

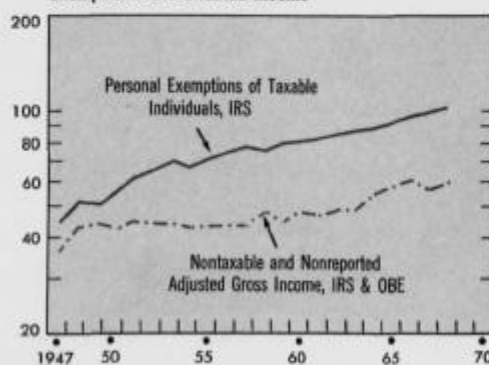
Taxable income has risen faster than personal income



Rapid growth in deductions . . .



has been more than offset by slow growth in exemptions and untaxed income



The imputed incomes deducted from personal income include wages paid in kind, the rental value of owner-occupied housing, food and fuel produced and consumed on farms, and the value of interest imputed to depositors in financial intermediaries, holders of life insurance policies, and participants in non-insured pension funds.

The other items subtracted from personal income include income not received by individuals, income excluded by law from AGI, and allowances for differences between the way incomes are reported in personal and in adjusted gross income. Personal income not received by individuals comprises income retained by fiduciaries, that is, not distributed to beneficiaries, and property income received

by nonprofit institutions serving households. In 1968, these items had estimated values of about \$3½ billion and more than \$1½ billion, respectively.

The items included in personal income but legally excludable from AGI are as follows, with their amounts in 1968: excluded sick pay, business expenses, moving expenses, and contributions to self-employed retirement plans, \$5½ billion; tax-exempt military pay and allowances, \$3½ billion; excluded dividends, \$1 billion; tax-exempt interest, \$1 billion; and tax-exempt dividend distributions, \$½ billion. The accounting differences between personal income and adjusted gross income involve the treatment of such items as depreciation on tenant-occupied residential properties and farms; gains on the sale of livestock, timber, and certain real estate developments; savings bond

interest; depletion charges on mineral production; and other items.

#### Additions to personal income

Of the items included in AGI but not counted in personal income, the fastest growth rate was shown by personal contributions for social insurance. The sharp rise in these contributions reflected increases in the contribution rate, increases in the maximum income level subject to contribution, and extension of the social security system to broader classes of workers. The other items not counted in personal income but included in AGI include realized capital gains, the taxable portion of annuities and pensions, and a host of miscellaneous items such as prizes, awards, gambling winnings, and so forth.

Table L.—Reconciliation Between Personal Income and Taxable Income, 1947–68

(Billions of dollars)

	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
1. Personal income (OBE).....	191.3	210.2	207.2	227.6	253.6	272.5	288.2	290.1	310.9	333.9	351.1	351.2	383.5	401.0	415.8	442.0	465.5	487.5	538.9	587.2	629.4	687.9
2. Subtract: Portion of personal income not included in adjusted gross income.....	28.3	31.2	30.0	34.0	30.7	40.1	41.0	47.5	60.9	52.5	58.7	66.0	68.0	73.1	78.7	82.0	88.5	93.3	103.7	111.1	124.7	137.3
(a) Transfer payments (except military retirement pay).....	11.0	11.4	12.1	14.0	12.2	12.7	13.6	15.0	18.0	18.0	20.0	25.1	20.0	27.8	31.0	32.4	34.3	34.5	38.0	42.5	50.2	57.9
(b) Other labor income (except food and military reserve pay).....	2.1	2.4	2.7	3.4	4.4	4.9	5.5	5.8	6.7	7.0	8.0	8.9	10.3	10.9	11.0	12.8	13.7	15.3	17.4	19.2	20.4	22.5
(c) Imputed income.....	8.7	9.3	9.9	10.7	12.5	14.9	15.3	16.2	18.9	17.5	18.4	19.0	20.7	21.9	22.7	23.8	25.0	27.7	29.8	32.1	34.6	37.2
(d) Other types of personal income.....	2.9	5.5	5.7	5.0	7.6	8.6	7.2	9.9	9.9	9.4	10.3	12.3	11.6	12.5	12.8	14.1	14.9	14.7	16.8	17.3	19.5	20.4
3. Add: Portion of adjusted gross income not included in personal income.....	5.8	6.2	6.0	7.0	8.9	8.6	8.4	10.2	12.6	13.4	14.1	15.6	18.4	18.1	21.2	20.4	23.3	27.2	30.8	38.1	41.0	48.4
(a) Personal contributions for social insurance.....	2.1	2.9	2.2	3.8	3.4	3.8	4.0	4.6	5.2	5.8	6.7	6.9	7.9	9.3	9.0	10.3	11.8	12.5	13.4	17.7	20.6	22.0
(b) Net gain from sale of capital assets.....	2.2	2.2	1.0	2.0	3.0	2.5	2.1	3.4	4.8	4.0	3.5	4.3	0.3	6.3	7.0	5.8	6.4	7.9	10.2	9.9	12.7	17.5
(c) Other types of income.....	1.5	1.5	2.2	2.1	2.6	2.2	2.3	2.2	2.6	3.0	4.9	4.4	4.3	3.5	4.0	4.3	6.0	0.8	7.2	7.4	6.7	8.1
4. Subtotal: Total adjustments for conceptual differences (2-3).....	19.5	25.0	24.0	26.1	27.8	31.0	33.2	37.2	37.5	39.1	44.6	60.3	80.2	86.0	87.5	82.6	66.3	64.0	71.9	78.0	83.7	98.0
5. Equals: Adjusted gross income of all individuals, estimated from personal income (OBE).....	171.8	185.2	183.2	201.5	222.8	241.5	255.0	252.9	273.4	293.8	306.5	310.5	323.3	348.0	359.3	380.1	406.2	421.5	467.0	511.2	545.7	589.9
6. Subtract: Adjusted gross income reported on nonfarm returns (IRS) <sup>1</sup> .....	14.4	21.4	22.0	25.0	19.2	18.7	18.3	19.5	18.9	18.2	18.3	19.0	17.3	18.3	18.0	18.1	18.4	20.7	19.0	18.3	17.4	16.1
7. Nonreported adjusted gross income, (8-6).....	22.1	21.4	22.8	22.4	35.4	23.0	20.3	21.7	24.9	24.1	20.1	29.7	38.2	38.5	28.4	31.4	31.4	34.8	37.8	42.7	46.9	44.6
8. Equals: Adjusted gross income of taxable individuals (IRS) <sup>2</sup> .....	135.3	142.1	138.6	156.5	183.3	193.6	210.5	209.7	223.0	240.6	232.2	262.2	267.8	297.3	311.8	330.6	350.4	370.0	400.3	450.2	457.4	558.3
9. Subtract: Deductions of taxable individuals.....	15.0	15.4	10.8	10.0	22.4	24.9	27.3	27.5	30.5	33.0	30.2	37.2	41.7	44.4	47.3	50.5	54.5	58.4	63.1	68.4	74.0	83.7
(a) Standard deductions.....	8.5	9.4	9.3	10.1	11.7	12.2	12.8	11.0	12.0	12.6	12.3	11.7	12.1	11.7	11.0	11.5	11.9	14.5	15.7	17.1	17.5	17.0
(b) Itemized deductions.....	7.1	6.0	7.7	8.9	10.9	12.7	14.5	16.9	18.5	21.0	23.9	25.5	20.0	32.8	36.0	38.7	42.0	43.9	47.4	51.2	56.5	66.7
10. Personal exemptions of taxable individuals <sup>3</sup> .....	44.3	50.9	50.1	55.2	61.4	64.3	66.0	67.0	71.2	74.6	70.8	75.8	70.7	81.2	82.5	85.1	87.4	88.3	91.0	90.2	90.1	103.7
11. Equals: Taxable income of individuals (IRS) <sup>4</sup> .....	75.4	74.8	71.7	84.3	99.2	107.2	114.3	114.2	127.3	141.4	149.2	145.2	166.4	171.5	187.6	195.6	206.4	229.3	254.3	285.5	314.2	351.9

1. Net of deficits.

2. Figures published by IRS in *Statistics of Income* for 1951, 1952, and 1953 have been reduced by the amount of income, and exemptions reported on returns showing self-employment tax but no income tax liability; this has been done in order to improve comparability with data published in *Statistics of Income* for subsequent years.

NOTE.—A more detailed reconciliation between personal income and OBE's estimate of adjusted gross income (lines 1 and 5) is available on request.

Sources: U.S. Department of Commerce, Office of Business Economics, and U.S. Treasury Department.